MONTANA WATER PROJECT

November 30, 2016

Michelle McGree
Montana Fish, Wildlife & Parks
Habitat Protection Bureau, Fisheries Division
P.O. Box 200701
Helena, MT 59620-0701

RE: **Future Fisheries Grant Application**

Dear Ms. McGree,

Trout Unlimited's Montana Water Project sumbits this Future Fisheries Grant Application to support an ongoing conservation project on Sauerkraut Creek, tributary of the Blackfoot River. The following material is attached to this letter:

1) Future Fisheries Grant Application
2) Supplemental Questionnaire for Water Leasing or Water Salvage Projects
3) Exhibit A. Map of Proposed Protected Stream Reach
4) Exhibit B. Sauerkraut Creek Restoration Project Report
5) Exhibit C. Lease for Instream Flow
6) Exhibit D. Comparison of Streamflows in Sauerkraut Creek, 2012-2015
7) Exhibit E. Photos of the Site, Pre-Project
8) Exhibit F. Map of Restoration Site, Pre-Project
9) Exhibit G. Future Fisheries Budget Template

While this application is submitted on behalf of the landowner and water right holder, Sunny Slope Grazing Association, please direct any questions or requests to me, via my contact information below. Thank you for your consideration.

Sincerely,

Meg Casey

**Trout Unlimited:** ***America's Leading Coldwater Fisheries Conservation Organization***
321 E Main St, Suite 411, Bozeman, MT 59715 • 406-599-8666 • mcasey@tu.org

**FUTURE FISHERIES IMPROVEMENT PROGRAM**
**GRANT APPLICATION**
*(please fill in the highlighted areas)*

## I. APPLICANT INFORMATION

A. Applicant Name: Trout Unlimited's Montana Water Project (TU)

B. Mailing Address: 321 East Main Street no. 411

C. City: Bozeman State: MT Zip: 59715

Telephone: 406 599 8666 E-mail: mcasey@tu.org

D. Contact Person: Meg Casey

Address if different from Applicant: NA

City: State: Zip:

Telephone: E-mail:

E. Landowner and/or Lessee Name (if other than Applicant): Sunny Slope Grazing Association (Stew Schwartz)

Mailing Address: 597 Upper Millegan Road

City: Great Falls State: MT Zip: 59405

Telephone: 406 965 3360 E-mail: None

## II. PROJECT INFORMATION*

A. Project Name: Sauerkraut Creek - Twenty Year Instream Flow Lease

River, stream, or lake: Sauerkraut Creek

Location: Township: 14N Range: 9W Section: 32
Latitude: 46.91626 Longitude: -112.75492 *within project (decimal degrees)*

County: Lewis & Clark

B. Purpose of Project:

To lease a minimum of 3.0, and up to 9.0 cfs in a split-season water rights lease from Stew Schwartz to augment instream flow, especially during the low-flow season, in Sauerkraut Creek

C. Brief Project Description:

This project is the final stage of a multifaceted stream restoration and conservation effort on Sauerkraut Creek that has been in progress since 2008. It is a twenty-year water rights lease for instream flow in the form of a split-season diversion-reduction agreement.

Under the terms of this lease, the irrigator agrees to stop diverting from the creek once the stream drops to 3.0 cfs—the minimum flow identified as critical to trout survival through the low-flow season. After test-running the impacts of this management arrangement to his operation for each of the past three summers, the irrigator agreed to enter into a twenty-year water right lease with Trout Unlimited. His cooperation has protected the stream from running completely dry, as it had in the past years, giving the fish a buffer for survival through the weeks when the creek is at its lowest-flow. And since there is no one taking water upstream, this lease will protect instream, all of the water available beyond the irrigator's use (see Exhibit D for streamflow records).

Historically, the upper reaches of Sauerkraut Creek were severely modified by mining, and the middle and lower reaches were impaired by irrigation. Despite substantial damage from these activities, Sauerkraut Creek supports a population of genetically pure westslope cutthroat trout and bull trout. Telemetry studies have also documented the use of Sauerkraut Creek by migratory cutthroat trout. With the cooperation of the irrigator, major restoration work was carried out on the creek between 2008 and 2012; including (1) the replacement of migration-blocking culverts on three stream crossings; (2) consolidation of several points of diversion into a single, fish-friendly point of diversion and the installation of a fish screen on that diversion; (3) installation of a conveyance pipeline that reduced irrigation water demand from 15.0 cfs to 6.0 cfs; (4) the restoration of 5,000 feet of stream channel upstream of the proposed protected reach with fencing to protect the restored channel. The relationship of this proposal to the previous restoration work is: (1) with passage issues resolved, it will be important to maintain sufficient flow in the stream to allow for fish passage; (2) the diversion consolidation will allow for sufficient control over the diversion to maintain a minimum flow in the stream, which was not practically possible under the old system.

Our primary target is to ensure critical flows are maintained at 3.0 during the low-flow period. However, the efficiency upgrades carried out in 2012 reduced the irrigator's needs from the full 15.0 cfs of the water right down to 6.0 cfs. This presents an opportunity to test a new legal rationale for what is recognized as "beneficial" to fisheries. In the water rights change process, we will propose to change all of the remaining 9.0 cfs to instream flow (rather than only 3.0 cfs), so that whatever is left after the 6.0 cfs is diverted for irrigation will remain to support fisheries. While the rationale for 3.0 cfs is to maintain critical habitat while flows are low, the rationale for protecting up to 9.0 cfs in the early irrigation is to maintain stream channel habitat by enhancing the realization of bankful flows necessary to sustain fishery populations. The DNRC has not yet recognized channel maintenance as a new rationale for dedicating water to support fisheries. The goal of this is to get DNRC to recognize that fisheries flows comprise more than simply base flows.

NOTE: If the agency rejects the channel maintenance rationale, we will simply move forward with purpose of flow augmentation, to protect 3.0 cfs instream.

D. Length of stream or size of lake that will be treated: 1.69 miles

E. Project Budget:

**Grant Request (Dollars): $** 20,000.00

Contribution by Applicant (Dollars): $ 5,000.00 In-kind $ 6,354.80

(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): $ 55,000.00 In-kind $

(attach verification - See page 2 budget template)

**Total Project Cost: $ 86,354.80**

F. Attach itemized (line item) budget – see template

G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

## III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

Native westslope cutthroat trout and bull trout.

B. How will the project protect or enhance wild fish habitat?:

At minimum, the project will protect and enhance native fish habitat by securing minimum instream flows necessary to sustain fisheries through the low-flow season.

C. Will the project improve fish populations and/or fishing? To what extent?:

This project will improve spawning and rearing habitat for cutthroat and bull trout populations in Sauerkraut Creek and the upper Blackfoot River.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

It will ultimately lead to increased populations the upper Blackfoot River, which is accessible in part of its reach to anglers.

E. If the project requires maintenance, what is your time commitment to this project?:

The landowners have signed a 20-year water lease with Trout Unlimited (see Exhibit C). Under the terms of the lease, TU is obligated to monitor flows in the protected reach for the life of the agreement. In anticipation of this project, TU has been monitoring the creek below the key diversion since 2012 (see Exhibit D).

F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

The limiting factors on Sauerkraut Creek--cutthroat resident and migratory passage, and bull trout rearing habitat--are most acute when the hydrograph has leveled off from its peak and starts a natural decline toward base flows. This decline has been exacerbated by the irrigator's diversions in seasons without a diversion-reduction agreement. The proposed project will secure critical minimum flows for resident fish.

G. What public benefits will be realized from this project?:

Protecting minimum flows through the low-flow season is the last piece of a multi-faceted restoration effort to restore Sauerkraut Creek. The public benefits include 1) increased native fishery populations, 2) increased amount of fishable water, and 3) improved water quantity on-site and downstream.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

No. The project simply requires the reduction of diversion at the irrigators' headgate once the flows drop to the flow trigger. As a result, there is no change experienced by landowners upstream. Downstream, there will be an increase in flow to the mouth of the stream in mid-to-late summers, when flows decline. Moreover, the water rights change process requires that we prove the project will pose no adverse effect to other water right holders before approval.

I. Will the project result in the development of commercial recreational use on the site?: (explain):

No. This transaction is one part of a multifaceted stream restoration and conservation effort on the creek that has been in progress since 2008. This project was instigated by the Big Blackfoot Chapter of Trout Unlimited to enhance the native fisheries in Sauerkraut Creek.

J. Is this project associated with the reclamation of past mining activity?:

No.

**Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.**

## IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:  Date: November 30, 2016

Sponsor (if applicable):

***Highlighted boxes will automatically expand.**

**Mail To:** **Montana Fish, Wildlife & Parks**
**Habitat Protection Bureau**
**PO Box 200701**
**Helena, MT 59620-0701**

**E-mail To:** **Michelle McGree**
**mmcgree@mt.gov**

**Incomplete or late applications will be returned to applicant.**
**Applications may be rejected if this form is modified.**

# FUTURE FISHERIES IMPROVEMENT PROGRAM

## SUPPLEMENTAL INFORMATION SHEET FOR WATER LEASING OR WATER SALVAGE PROJECTS

The following additional information is requested to supplement the Future Fisheries Application for projects associated with water leasing or water salvage. Please complete this supplemental form and submit it as part of the Future Fisheries Grant Application.

1. **Please complete the following table describing the water right(s) associated with the proposed project.** Note: Much of this information can be obtained either from your own water rights records or online at http://www.dnrc.state.mt.us/wrd/home.htm (choose "water rights" and then select an index to look up applicable claims)

| Right Number; Water Source | Point Of Diversion | Quantified Flow (cfs) Volume (af) Irrigated Acres | Priority Date; Period Of Use | Relative Priority On Water Source | Purpose Of Water Right | Other Claimed On The Stream Senior To Your Listed Claims |
|---|---|---|---|---|---|---|
| 76F 98260<br><br>Sauerkraut Creek | NENWSE Sec 32, 14N 9W | 15.0 cfs<br>90 af<br>75 irrigated acres | July 1, 1913<br><br>April 20 through September 15 | 2nd priority of 13 claims | Irrigation | Two unquantified instream stockwater rights owned by same irrigator |

2. **In the last 10 years, has your full water right amount regularly been available at your point of diversion throughout your period of use?**

   **Yes / No** (Please circle one)

   **Have you ever made "a call" on junior water users to obtain the water you needed (through a water commissioner or otherwise)?**

   **Yes / No** (Please circle one)

3. **Please describe or include a summary of any measurements of the amount of water you have regularly diverted and how much typically flows by your diversion during different time periods.**
   For the past three summers, the irrigator entered into single-season management agreements to test-run the impacts of this split-season arrangement. Our flow monitoring showed that is cooperation has protected the stream from running near to completely dry, as it had in many years past (see Exhibit D). This gave the fish a buffer for survival through the weeks when the creek is at its lowest-flow. And since there is no one taking water upstream, this lease will protect instream, all of the water available beyond the irrigator's use.

4. **Has your local FWP fish biologist confirmed that your leasing/salvage project addresses a stream flow problem that significantly limits the fishery?**

   **Yes / No** (Please circle one)

5. **How much actual water (often different than just the remainder of your water rights) will be added to the stream through completion of your project?**

   At least 3.0 cfs Please fill in and circle one - cfs / gpm / miners inches

   **What length of stream will benefit from this additional flow?** (Note: Under certain circumstances, senior water can be protected legally from diversion by downstream junior users.)

   1.69 miles

6. **Is there a water commissioner on your stream? Yes / No** (Please circle one)
   **Are you willing to actively assist in monitoring and/or protecting the conserved water instream? Yes / No**

   Under Montana law, Trout Unlimited is obligated to monitor and report flows in the protected reach for the life of the agreement to the DNRC. In anticipation of this project, TU has been monitoring the creek below the key diversion since 2012 (see Exhibit D).

   In addition, TU will supply the irrigator with a rating table and request that he record readings on a weekly basis. TU will be able to monitor the irrigator's compliance by measuring the Sauerkraut flows through the irrigation season once per month in May and June, and then every couple of weeks in July and August until the flows reach 3.0 cfs. TU will communicate these measurements with the irrigator as the flows approach and eventually reach 3.0 cfs. TU will also take at least one more flow measurement after the irrigator has ceased diverting the water.

**Exhibit A.** Sauerkraut Creek Proposed Flow-Protected Reach

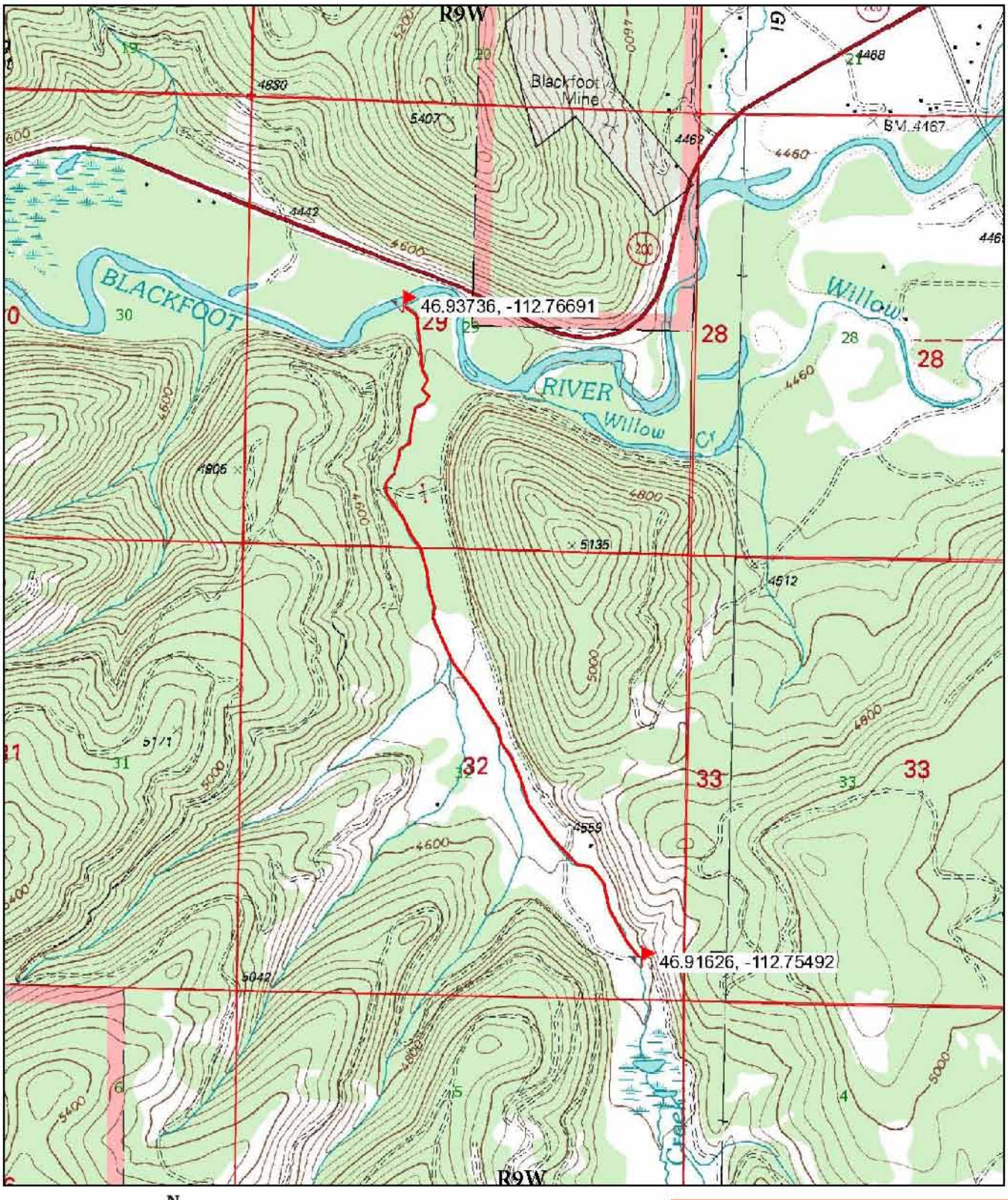

**Exhibit B.** Exerpt from FWP Fisheries Investiation Report, 2011-2012

In 2011 and 2012, we continued to monitor fish populations in lower Rock Creek (mile 1.6) where the stream was reconstructed in 1999 (Figure 52). This location continues to be dominated by brown trout and brook trout species and overall numbers appear to have leveled. In 2013, we observed low to moderate livestock impacts to stream banks and signs of channel widening in the monitoring section, as well as the return of excessive livestock pressure on a restored segment of Rock Creek (Photo 1).

## Sauerkraut Creek

*Restoration objectives:* Restore natural stream morphology to improve spawning and rearing conditions for native cutthroat trout and bull trout.

Project summary

Sauerkraut Creek is a small tributary to the upper Blackfoot River, entering at river mile 102.1 with a base flow of 3-4 cfs. Sauerkraut Creek has a long history of placer mining, which has resulted in severe channel alterations, including channelization, the loss of floodplain function and contributes to intermittent flows in one section of stream. In addition, inadequate stream crossings and overgrazing by livestock has also contributed to the degraded channel conditions. Restoration of Sauerkraut Creek began in 2008 when a conservation easement intended to promote the conservation of native trout was placed on private ranchland. As part of the agreement, a stream restoration project was developed in upper Sauerkraut Creek (miles 2-3) to correct past mining impacts. Restoration involved the reconstruction of approximately 5,000 feet of Sauerkraut Creek, a grazing management plan including riparian fencing and off-site water developments, shrub transplants, seeding and weed management. In 2010-12, three undersized stream crossings (miles 0.3, 1.5 and 1.8) were upgraded from undersized culverts to bridges to accommodate fish passage and channel function. In addition, irrigation ditches were consolidated into a single diversion with a fish screen. An instream flow agreement was also secured for a minimum flow of three cfs on the lower two miles of Sauerkraut in 2012. Future restoration work in both lower and upper Sauerkraut Creek is currently in development phases.

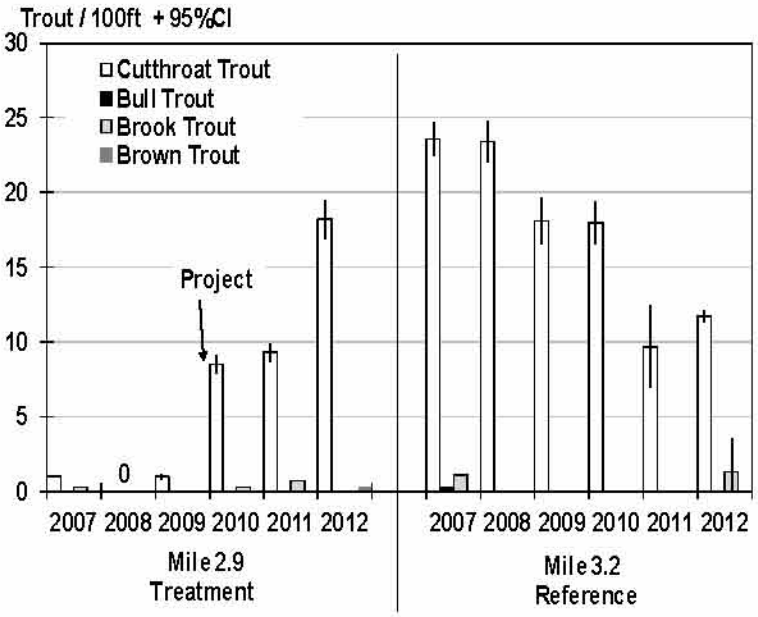


Figure 53. Estimates of abundance age 1 and older trout in Sauerkraut Creek at treatment (mile 2.9) and reference reaches (mile 3.2), 2007-2012.

Fish population monitoring

Sauerkraut Creek supports primarily westslope cutthroat trout along with low numbers of brook and bull trout in the headwaters and a mixed community of salmonids in the lower stream (Appendix B). Sauerkraut Creek supports a small run of migratory cutthroat trout as identified in past telemetry study (Pierce et al. 2007). Westslope cutthroat trout have been tested as genetically unaltered.

To develop a fisheries baseline for the upper Sauerkraut Creek restoration project, we established a fisheries monitoring site at an upstream reference reach site (mile 3.2) and within the treatment site (mile 2.9) beginning in 2007 (Figure 53). Reference reach surveys (mile 3.2) recorded a slight decline, probably the result of fish redistribution or increases in livestock grazing pressure on streambanks.

**Snowbank Creek**

*Restoration objectives:* Restore migration corridor for native fish; enhance in-stream flows; eliminate loss of bull trout and westslope cutthroat trout to a diversion ditch; improve recruitment of native fish to Blackfoot River.

Project summary

Snowbank Creek is a first-order tributary to Copper Creek, entering at stream mile 5.9. Snowbank Creek was identified as chronically dewatered with fish passage and entrainment problems in 2003. Following initial surveys, instream flows were enhanced to a minimum of four cfs, in 2004, and then in 2009 the diversion was replaced with one that allows fish passage and a Coanda fish screen was placed in the ditch to eliminate entrainment. Additional work is now being planned to: 1) remove an undersized culvert from lower Snowbank Creek, and 2) prevent loss of water from Snowbank Lake.

Fish populations and other monitoring activities

Fish population monitoring began in 2003 and continued through 2012 downstream of the diversion (Figure 54). Initial surveys identified increases in cutthroat trout abundance and the apparent re-colonization of bull trout from Copper Creek into Snowbank Creek after flows in lower Snowbank Creek were reestablished (Pierce et al. 2011). In 2008, the USFS documented bull trout spawning in Snowbank Creek for the first time, which included the historically dewatered stream segment. Between 2008 and 2012, bull trout redd counts in Snowbank Creek have averaged 18 (range: 1-34). Results from genetic samples collected from westslope cutthroat trout in 2009 found no introgression.

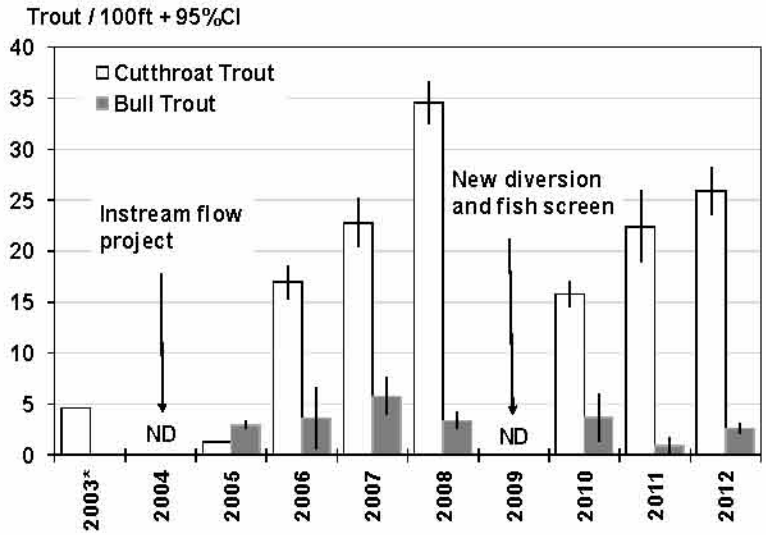


Figure 54. Population estimates for age 1 and older cutthroat trout and bull trout downstream of Snowbank Creek diversion, 2003-2012.

**Exhibit C.** Lease for Instream Flows

# WATER RIGHTS LEASE AGREEMENT FOR INSTREAM FLOWS

**THIS AGREEMENT** for the lease of water rights is between Trout Unlimited and Sunny Slope Grazing Association (Sunny Slope).

## RECITALS

**I.** Trout Unlimited enters into this lease agreement to provide for instream flows in Sauerkraut Creek, a tributary to the Blackfoot River. Maintaining instream flows in Sauerkraut Creek pursuant to this agreement will benefit westslope cutthroat trout and bull trout that migrate up Sauerkraut Creek to spawn by providing passage to spawning and rearing areas.

**II.** Sunny Slope owns water right claim no. **76F 98260**, which is diverted from Sauerkraut Creek and has a priority date of July 1, 1913. The flow rate for this claim is 15.0 cubic feet per second (cfs).

**III.** Sunny Slope and its predecessors in interest have diverted water from Sauerkraut Creek since 1913 under water right claim 76F 98620 and have used the water for flood irrigation.

**IV.** Of the 15.0 cfs that Sunny Slope has diverted under claim no. 76F 98620, a significant amount of the right is lost while transported through the irrigation ditch to the place of use. In addition, when flows drop as the season progresses, Sunny Slope's irrigation diversions can significantly reduce stream flow in Sauerkraut Creek.

**V.** In 2012, Sunny Slope modified its conveyance system from a ditch system to a pipeline, and combined several diversions from Sauerkraut Creek to a single point of diversion. As a result of these efficiency upgrades, Sunny Slope is able to deliver water to its place of use by diverting no more than 6.0 cfs of water.

**VI.** Sunny Slope wishes to lease part of its water right to Trout Unlimited for instream flow purposes in Sauerkraut Creek, as follows:

**a.** During the high water period (typically in the month of June): a flow rate of up to 9.0 cfs—the amount of water conserved as a result of the 2012 upgrades described in paragraph 5. This flow will maintain stream channel habitat by enhancing the realization of bankful flows necessary to sustain Sauerkraut fishery populations.

**b.** During low water period of the year (typically mid-July to mid-August): a flow rate of up to 3.0 cfs, as measured approximately 150 yards downstream of the headgate. This flow rate will maintain a minimum of 3.0 cfs in Sauerkraut Creek.

**VII.** The parties to this lease intend this agreement to accomplish its instream flow purposes as set forth in the agreement pursuant to the provisions of section 85-2-407 and 408, Montana Code Annotated.

**THEREFORE,** the parties agree as follows:

1. **Lease of Water Right Claim.** Trout Unlimited leases the part of the following water right claim no. 76F 98260, priority date of July 1, 1913 as follows:

**a.** in the amount of up to 9.0 cfs as measured below the headgate from June 1 to June 30 (runoff) annually in Sauerkraut Creek, with the remaining 6.0 cfs of claim no. 76F 98620 dedicated to irrigation;

**b.** in addition to the terms described in subsection (a) of this section, if flows, as measured below the headgate, drop to 3.0 cfs, Sunny Slope will reduce irrigation to assure the maintenance of a flow of at least 3.0 cfs at that location.

2. **Term of Lease.** The term of this lease shall be for twenty (20) years, commencing on the date that the Department of Natural Resources and Conservation (DNRC) approves this lease agreement and the associated applications for changes in use of the water rights claim, unless otherwise terminated by either party.

3. **Trout Unlimited Contributions.** In consideration for Sunny Slope's commitments in this agreement, Trout Unlimited shall:

**a.** pay all costs, including the application fee, and do all the work associated with compiling the application to change purpose of use, place of use, and point of diversion for water right claim no. 76F 98260 up to the point of DNRC publishing a notice of application;

**b.** pay for the installation and use of any measuring devices required by DNRC for the reach to be protected by instream flows;

**c.** pay Sunny Slope a total of eighty thousand dollars ($80,000.00); and

**d.** attempt to accommodate splitting the payment between two calendar years, by rendering payment according to the following terms:

i. Trout Unlimited will issue to Sunny Slope two (2) separate payments of forty-thousand dollars ($40,000.00) each—one per calendar year, and both in a single fiscal year of Trout Unlimited (October 1 to September 30).

ii. Trout Unlimited will make payment at the earliest date practicable *after* DNRC approval of this lease and associated change(s) in appropriation.

iii. If dividing the payment between calendar years necessitates splitting the payment between two fiscal years of the entity providing the funds, Trout Unlimited will seek funding of the first payment within the fiscal year in which DNRC makes its approval, and will make payment in the funder's second fiscal year as soon as is practicable after funding is secured in that year.

iv. If the funding is unavailable in the donor's ensuing fiscal year and Trout Unlimited is unable to secure funds for the second payment within ten (10) years of DNRC's approval, the lease will terminate at the end of the tenth irrigation season after DNRC approval.

4. **Sunny Slope Contributions.** In consideration of Trout Unlimited's actions in paragraph 3 of this lease, Sunny Slope shall:

**a.** lease to Trout Unlimited part of its water right claim no. 76F 98260 in the amount of up to 9.0 cfs during runoff, representing water salvaged by the irrigation improvements, and not less than 3.0 cfs during the entire irrigation season or as approved by DNRC;

**b.** afford Trout Unlimited or its designated representatives reasonable access to Sauerkraut Creek at the measuring site in order for Trout Unlimited to carry out its flow monitoring obligations described in paragraph 5; and

**c.** cooperate with Trout Unlimited to provide information necessary to complete the application for changes in use of the water rights claim.

5. **Flow Measuring Devices and Schedule.** Trout Unlimited shall implement whatever stream flow measurement devices and program that DNRC requires in approving the application for change.

6. **Appointment of Water Commissioner.** If a water commissioner is appointed to administer diversions on Sauerkraut Creek, Trout Unlimited shall pay for the cost of the commissioner's distribution of water under the water right claim leased for instream flows in this agreement during the term of this lease.

7. **Changes in Purpose of Use.** The parties recognize that DNRC must approve the changes in the purpose, place of use, and point of diversion of water right claim no. 76F 98260. The parties recognize that, in the course of this review, DNRC might modify the amount claimed in order to avoid any enlargement of the right over what has been historically used. While Trout Unlimited cannot act as Sunny Slope's legal representative in any proceedings before DNRC, it will assist Sunny Slope in the compilation of any documentation required by DNRC in its review. If DNRC does not approve the application and lease agreement, or if DNRC imposes conditions of approval unacceptable to either party, either party may terminate this agreement. Upon termination of this agreement, Trout Unlimited

agrees to execute any and all documents required to change the purpose and place of use to back to that in existence at the date of execution of this agreement.

8. **Default.** If either party fails to perform material duties described in this agreement, the other party may serve a written notice specifying the default. The defaulting party shall have thirty (30) days from the date written notice of the default is received to correct the default if it is correctable. If the default is not correctable or is not corrected within thirty (30) days, then the non-defaulting party may terminate this agreement without further notice.

9. **Notice.** Any notice given under this agreement must be in writing and must be served on the party to receive it by registered or certified mail, return receipt requested and sent to the party's address as set forth below. A party wishing to change its designated address must do so in a writing sent to the other party. Notice served under this provision shall be complete when deposited in the United States mail. Refusal to accept or failure of delivery because of a changed address for which no change-in-address was given shall be considered receipt of notice.

Trout Unlimited's liaison address is:

Patrick Byorth
Trout Unlimited—Montana Water Project
321 East Main Street, Ste. 411
Bozeman, MT 59715

Sunny Slope's address is:

c/o Stew Schwartz
455 US Highway 89
Vaughn, MT 59487

10. **Pending Adjudication.** Trout Unlimited leases Sunny Slope's water right claim subject to the statewide adjudication. Sunny Slope is responsible for pursuing the Water Court adjudication of the water right claim being leased. If the water right claim is not upheld, or is reduced significantly in the adjudication, Sunny Slope is entitled to use a greater portion of claim no. 76F 98260 so that his irrigation need of 6.0 cfs will be met during runoff.

11. **Abandonment of Water Rights.** Nothing in this agreement shall be interpreted to work an abandonment or to express an intent to abandon the water right claim leased in this agreement, or the underlying rights to maintain and use the ditch which has previously conveyed the water that is the subject of this lease. Pursuant to 85-2-404(4), MCA, the parties affirm that the lease of the water right claim hereunder does not constitute an abandonment of that water right claim, and cannot serve as evidence that could be used to establish an abandonment of any part of that water right claim.

12. **Indemnification.** Trout Unlimited shall indemnify and hold harmless Sunny Slope against any claim or action by third parties challenging the use of the water leased under this agreement by Trout Unlimited, challenging the validity of the statutes allowing the lease of water for instream purposes, or challenging the validity of this lease agreement on any grounds.

13. **Reimbursement for Early Termination.** If, after payment of the amount described in paragraph 3.c., Sunny Slope or its successor in interest terminates this lease for any reason, or uses a greater portion of claim no. 76F 98260 pursuant to paragraph 10, they shall reimburse Trout Unlimited a pro rata share of

the lease payment based on the difference between the term of the lease and the time completed before termination.

14. **Binding Effect.** The provisions of this lease are binding on the heirs, personal representatives, administrators, and successors of the parties to the same extent as on the original parties, except as otherwise provided by mutual written consent.

15. **Cooperation.** The parties to this agreement shall cooperate fully and shall provide such assistance and information as may be necessary to implement this agreement. Sunny Slope will provide reasonable access to Trout Unlimited or its designees for purposes of measuring flows and reading gages as described in paragraph 5 of this agreement or as a condition of DNRC authorization of the change of appropriation.

16. **Attorney Fees and Costs.** If legal action is brought to enforce this agreement, the prevailing party shall be entitled to recover reasonable attorney fees and costs incurred in bringing or defending the action.

Dated this day of January, 20 17.

**Sunny Slope Grazing Association**

by Stewart Schuster President
455 US Highway 89
Vaughn, MT 59487

State of Montana
County of Teton
Subscribed and sworn before me this 15th day of January, 20 17

Notary's Signature Brittany Janzen
Brittany Janzen

BRITTANY JANZEN NOTARIAL SEAL STATE OF MONTANA

BRITTANY JANZEN
NOTARY PUBLIC for the
State of Montana
Residing at Fairfield, Montana
My Commission Expires
August 18, 2018

**Trout Unlimited**

by _____

321 East Main Street, Ste 411
Bozeman, MT 59715

Subscribed and sworn before me this 16th day of April, 2015

Notary's Signature _____

Kayle Ersek

KAYLE ERSEK
NOTARY PUBLIC for the
State of Montana
Residing at Bozeman, Montana
My Commission Expires
September 24, 2018

Notary for the State of Montana

Residing at Bozeman MT

My commission expires 9/24, 2018

**Exhibit D.** Sauerkraut Creek Flow Records

## TROUT UNLIMITED DISCHARGE MEASUREMENT LOG

Discharge measurement of Sauerkraut Creek **below Diversion** @ Sunny Slope Ranch, nr Lincoln, MT (46*54'59.2"112*45'17.4")

| No. | Date | Hydrographer | Width ft | Area Sq ft | Mean Vel, fps | Gage Ht, ft | Discharge Cfs | No. Sec | Time | H2o temp F | Method | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 06/01/12 | Ron Shields, Stan Bradshaw | 15.0 | 12.56 | 1.70 | 1.10 | **21.40** | 25 | 10:45 AM | 42.0 | .6 MMB(3) | Sectional riffle clear, GhtZF=0.2ft, Stan Phil K. installed Tru-Track & staff Gage |
| 2 | 06/12/12 | Phil Karper | 16.0 | 12.81 | 1.61 | 1.12 | **20.70** | 24 | 3:15 PM | 53.0 | .6 Pyg(Phil's) | Sectional riffle clear, Measured 15 ft. Dstr. |
| 3 | 06/21/12 | Ron Shields, Stan Bradshaw | 14.4 | 12.18 | 1.38 | 1.04 | **16.75** | 21 | 12:30 PM | 50.0 | .6Pyg Ron's | Sectional riffle clear, Measured 15 ft. Dstr.Downloaded Tru-track info |
| 4 | 07/09/12 | Phil Karper | 8.2 | 5.27 | 1.30 | 0.74 | **6.84** | 26 | 1:45 PM | 60.0 | .6 Pyg(Phil's) | Riffle minor algae, meas 30ft upstr GhtZF=.74-.65=.09 |
| 5 | 07/11/12 | Stan Bradshaw | 13.1 | 7.53 | 0.81 | 0.73 | **6.10** | 24 | 12:40 PM | 54.0 | .6 MMB(1) | Riffle minor algae, meas 30ft dstr GhtZF=.73-.58=.15 |
| 6 | 07/31/12 | Phil Karper | 6.9 | 3.57 | 0.85 | 0.58 | **3.04** | 21 | 1:15 PM | 61.0 | .6 Pyg(Phil's) | Algae on riffle, PZF = +-0.10ft. Meas 90 ft dstr. |
| 7 | 08/21/12 | Phil Karper | 6.1 | 2.83 | 0.69 | 0.51 | **1.97** | 25 | 1:45 PM | 62.0 | .6 Pyg(Phil's) | Algae on riffle, PZF = +-0.11ft. Meas 60 ft dstr. |
| 8 | 09/14/12 | Ron Shields, Stan Bradshaw | 9.0 | 4.02 | 0.37 | 0.48 | **1.47** | 26 | 12:15 PM | 48.0 | .6Pyg Ron's | Minor algae on riffle PZF=+-0.16ft. Meas 20 ft dstr. Downloaded Tru-Track data and removed rod. |
| 9 | 05/24/13 | Ron Shields, Stan Bradshaw | 13.6 | 10.75 | 1.33 | 1.02 | **14.27** | 28 | 9:45 AM | 36.0 | .6 MMB(3) | Riffle,clr,installed Tru-Track plots -9.9% Meas 10ftdstr |
| 10 | 06/08/13 | Phil Karper | 9.5 | 7.50 | 1.60 | 0.93 | **12.00** | 24 | 1:05 PM | 55.0 | .6 MMB(2) | Riffle, minor aquatic growth. Meas 30 ft upstr. -1.9% |
| 11 | 06/26/13 | Stan Bradshaw | 13.9 | 9.91 | 1.09 | 0.87 | **10.82** | 26 | 2:10 PM | | .6 MMB(2) | Riffle,clear GhtZF= 0.87ft-0.40ft = 0.47ft, Shift +0.02 ft |
| 12 | 06/30/13 | Phil Karper | 8.5 | 5.85 | 1.23 | 0.80 | **7.21** | 26 | 2:25 PM | 61.0 | .6 Pyg(Phil's) | Aquatic growth on riffle,meas 30 ft upstr,PZF = -0.10ft,shift -0.03ft |
| 13 | 07/24/13 | Phil Karper | 6.5 | 4.02 | 0.74 | 0.58 | **2.98** | 20 | 12:05 PM | 58.0 | .6 Pyg(Phil's) | Riffle,minor algae,meas.100ft dstr.Plots on RT#1,PZF = 0.10ft. Est 0.1 cfs being diverted |
| 14 | 08/17/13 | Phil Karper | 5.2 | 2.01 | 0.79 | 0.52 | **1.58** | 23 | 12:10 PM | 50.0 | .6 Pyg(Phil's) | Riffle, some algae,PZF=0.14ft shift -0.04ft M250dstr |
| 15 | 09/23/13 | Ron Shields, Stan Bradshaw | 9.3 | 3.62 | 0.38 | 0.48 | **1.37** | 23 | 9:45 AM | 46.0 | .6PygRon's | Riffle,some algae,Shift -0.02ft PZF=0.13ft. 20'dstr,removed Tru-Track |
| 16 | 06/14/14 | Phil Karper | 9.4 | 5.51 | 1.27 | 0.78 | **7.02** | 23 | 12:15 PM | 47.0 | .6 MMB(1) | Riffle, clr Shift -.01' PZF=0.10ft+- meas 30' upstr |
| 17 | 07/03/14 | Phil Karper | 9.5 | 6.79 | 1.51 | 0.86 | **10.24** | 25 | 12:25 PM | 56.0 | .6 Pyg(Phil's) | Clr Riffle plots +4.4% no shift needed |
| 18 | 07/28/14 | Phil Karper | 4.6 | 1.15 | 0.89 | 0.44 | **1.03** | 17 | 11:50 AM | 53 | .6 Pyg(Phil's) | Clr Riffle plots -0.02ft shift PZF = 0.44-.25=0.19ft. |
| 19 | 08/03/14 | Stan Bradshaw | 10.2 | 3.65 | 1.23 | 0.69 | **4.48** | 23 | 10:35 AM | 58 | .6 MMB(2) | Clr riffle. Plots-0.03'shift PZF=.24+- Diversion closed |
| 20 | 09/02/14 | Phil Karper | 6.5 | 2.17 | 1.04 | 0.56 | **2.25** | 20 | 10:15 AM | 47 | .6 Pyg(Phil's) | minor alage on riffle Plots -0.03ft to RT |
| 21 | 06/13/15 | Phil Karper | 7.1 | 3.71 | 0.84 | 0.65 | **3.12** | 23 | 1:00 PM | 55 | .6 Pyg(Phil's) | Minor aquatic, water being diverted Plots-0.06ft PZF= 0.65-0.75 =-0.10ft |
| 22 | 06/23/15 | Stan Brashaw, Meg Casey | 11.2 | 4.56 | 0.45 | 0.6 | **2.07** | 20 | 12:00 PM | 54 | .6 MMB(2) | Minor aquatic, water being diverted Plots-0.08ft PZF= 0.60-0.48 =-0.12ft DP will close HG today |
| 23 | 07/05/15 | Phil Karper | 7.2 | 3.29 | 0.84 | 0.64 | **2.78** | 24 | 1:20 PM | 54 | .6 Pyg(Phil's) | Aquatic growth on riffle,plots -0.07ft PZF=0.07ft. |
| 24 | 07/26/15 | Phil Karper | 6.9 | 2.72 | 0.67 | 0.56 | **1.84** | 24 | 1:45 PM | 56 | .6 Pyg(Phil's) | Aquatic growth on riffle,plots -0.06ft PZF=0.04ft. |
| 25 | 08/15/15 | Phil Karper | 6.1 | 2.07 | 0.65 | 0.53 | **1.36** | 19 | 12:20 PM | 56 | .6 Pyg(Phil's) | Aquatic growth on riffle,plots -0.07ft |

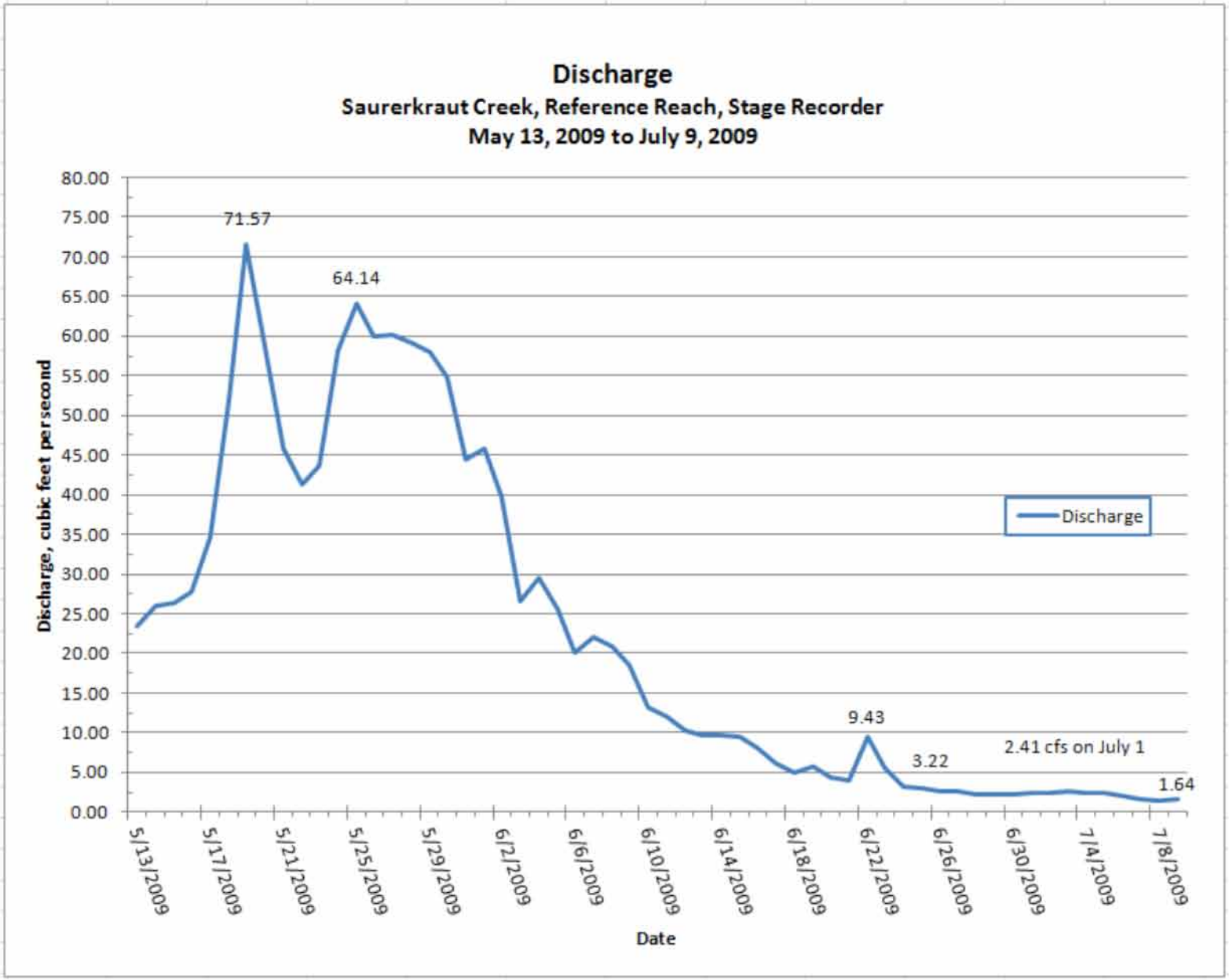
Discharge
Saurerkraut Creek, Reference Reach, Stage Recorder
May 13, 2009 to July 9, 2009
Discharge, cubic feet per second
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
71.57
64.14
9.43
3.22
2.41 cfs on July 1
1.64
Discharge
5/13/2009
5/17/2009
5/21/2009
5/25/2009
5/29/2009
6/2/2009
6/6/2009
6/10/2009
6/14/2009
6/18/2009
6/22/2009
6/26/2009
6/30/2009
7/4/2009
7/8/2009
Date

**Exhibit E.** Sauerkraut Restoration Site, Pre-Project, 2009 (Courtesy of M. McLane)

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**Exhibit F.** Sauerkraut Restoration Site, Pre-Project, 2009 (Courtesy of M. McLane)

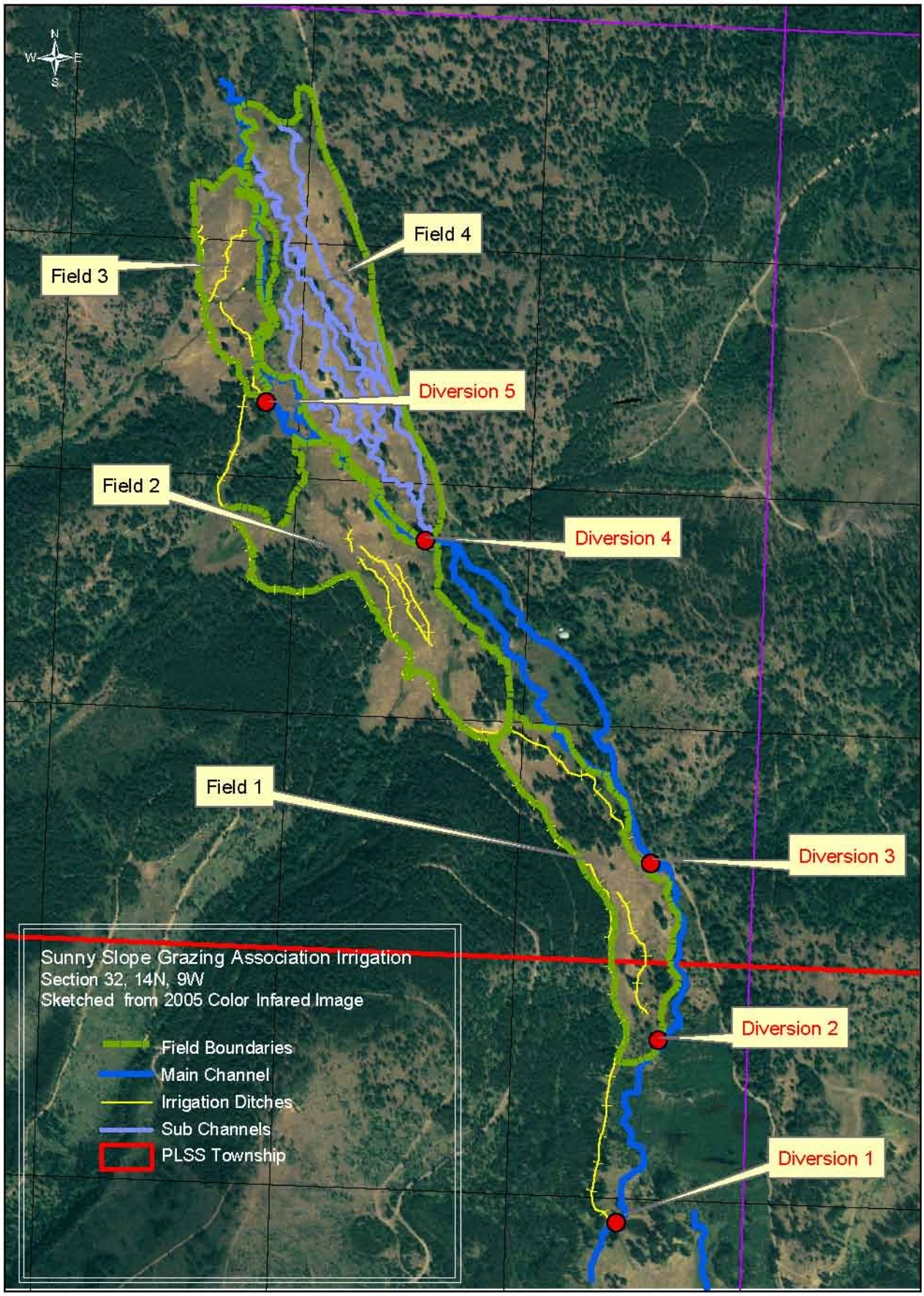

**Exhibit G.** Budget for Instream Lease on Sauerkraut Creek, 2016

## PROJECT BUDGET FOR FUTURE FISHERIES GRANT APPLICATION

| WORK ITEMS | NUMBER OF UNITS | UNIT DESCRIPTION* | COST/UNIT | TOTAL COST | CONTRIBUTIONS | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | FUTURE FISHERIES REQUEST | IN-KIND SERVICES | IN-KIND CASH | TOTAL |
| **Personnel** | | | | | | | | |
| Survey<br>Design<br>Engineering<br>Permitting<br>Oversight<br>Labor<br>Monitoring | 200 | hours | 28.48 | $ 5,696.00 | | $ 5,696.00 | | $ 5,696.00 |
| | 480 | miles | $ 0.54 | $ 259.20 | | $ 259.20 | | $ 259.20 |
| Subtotals | | | | $ 5,955.20 | | $ 5,955.20 | | **$ 5,955.20** |
| **Travel** | | | | | | | | |
| Mileage<br>Per diem | 740 | miles | $ 0.54 | $ 399.60 | | $ 399.60 | | $ 399.60 |
| Subtotals | | | | $ 399.60 | | $ 399.60 | | **$ 399.60** |
| **Instream Flow Lease** | | | | | | | | |
| Payment to Irrigator | 20 | years | $ 4,000.00 | $ 80,000.00 | $ 20,000.00 | | $ 60,000.00 | $ 80,000.00 |
| Subtotals | | | | $ 80,000.00 | $ 20,000.00 | | $ 60,000.00 | **$ 80,000.00** |
| **Equipment** | | | | | | | | |
| Subtotals | | | | | | | | |
| **Mobilization** | | | | | | | | |
| | | | **TOTALS** | **$ 86,354.80** | **$ 20,000.00** | **$ 6,354.80** | **$ 60,000.00** | **$ 86,354.80** |

*Units = feet, hours, inches, lump sum, etc.

### MATCHING CONTRIBUTIONS

| Contributor | IN-KIND SERVICE | IN-KIND CASH | TOTAL | Verified? (Y/N) |
|---|---|---|---|---|
| Trout Unlimited's Montana Water Project | $ 6,354.80 | | $ 6,354.80 | Y |
| Trout Unlimited's Stream Flow Fund | | $ 5,000.00 | $ 5,000.00 | Y |
| US Fish and Wildlife Service | | $ 10,000.00 | $ 10,000.00 | N |
| Columbia Basin Water Transaction Program | | $ 45,000.00 | $ 45,000.00 | N |